RS-INT
RESEARCH PROGRAMS
Ponderosa Pine Production Study
(Field Season Reports)

1954 FIELD SEASON
SUMMARY OF FIELD WORK ON THE BOISE BASIN EXPERIMENTAL FOREST

by

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I. Field Station Reopening

Reopening of the headquarters buildings (B.B.E.F.) at Idaho City began May 20 and required most of the remainder of the month and the forepart of June. Other work at this stage included inspection of roads on the Experimental Forest, budget planning with Zillgitt and Curtis and observing administration's Town Creek planting job.

Two field assistants, Wayne Wadsworth and John Richardson, reported for duty on June 14. They were given driver's examinations, safety instruction and familiarized with the work plan for the ponderosa pine production study.

II. Installation Work - Ponderosa Pine Production Study

A. Sampling hubs.

The field assistants were given 2½ days instruction in the installation of the type of sample plot (referred to as "hubs") used in this study and were then assigned to the completion of the installation of the 122 hubs remaining in the second replicate compartments. (See 1953 Field Season Report, p. 3.) This work was completed between June 21 and August 2. Several checks on progress and quality of field work were made by the writer during this period.

B. Spur road revisions.

Because of length of deadhead road and unstable slopes on the originally proposed entrance road to Compartment 1, this road was reflagged to utilize the old logging road along the north boundary of the Experimental Forest.

In Compartment 20, the west spur (as flagged) was considered to be too steep at its lower end for trucks so plans were changed to make it a bladed skid trail rather than a road. Lengthening of the east spur was found necessary.

These changes were flagged out June 17 by Greenway (MacGregor Logging Co., forester) and Packer (Forest Influences, Boise Research Center) and the writer.

C. Marking second replicate compartments for cutting.

Marking for cut in the compartments scheduled for 1954 logging involved the same procedures followed in marking the 1953 compartments.(See 1952 Field Season Report, p. 3). Locations of marked trees were noted on compartment maps for later use during logging operations.

The only difference in procedure from that used in the 1953 compartments was in the random selection of check scale trees in group selection compartments. Where random selection of such trees had previously been made in the marking books, followed by field location of them (see 1953 Field Season Report, p. 8, also Marsh's note for files of July 1, 1953 in Marking folder), the procedure followed in the 1954 marking of group selection compartments was to mark for cut until a page or more of the book had been filled, then draw at random

for check scale trees by the use of numbered aluminum tags for a 12% sample of the marked trees. Check scale trees were then located, blazed and numbered before proceeding with further marking. Each check scale tree was noted by number on a special flow-chart map for later use by the sale administrator.

Marking of all the 1954 compartments was done by Wilson and Curtis between July 1, and August 12.

D. Ground photography.

Prelogging ground photographs in color and black-and-white were taken in the second replicate compartments principally by Curtis, with some help by Lynch and Wilson. All photo points were staked with numbered wooden stakes and marked on maps for future relocation.

Angle-iron stakes for future replacement of the wooden photo stakes were painted white and stored in the shop-garage.

E. Survey of spur roads.

Compass and chain surveys of spur roads in all first replicate compartments were made by Wadsworth and Richardson and later plotted by Richardson. These surveys were made for the purpose of keeping the compartment maps (5 ch. per inch) and the Experimental Forest map (10 ch. per inch) up to date.

Surveys were also made of main roads through Compartments 9, 11A, 11B, 24B and 28 to permit more accurate plotting of these.

Plans for 1955 include the surveying and plotting of roads in the second replicate compartments.

F. Replacement of wooden hub stakes with steel.

Toward the end of their stay 1/, the field assistants were given the job of replacing the temporary wooden hub stakes in the first replicate compartments with stamp-numbered angle-iron center stakes and round (3/8") reinforcing steel stakes at each arm end.

Before beginning the actual replacement, angle-iron center stakes for all hubs of the first replicate were dip-painted with yellow traffic paint, stamped with the hub number and bundled together by compartment and condition class by Wadsworth. The round steel arm stakes were dip-painted yellow at the same time. Except for the ones used, all these stakes are stored in the back room of the shop-garage.

Field replacement was completed in Compartments 4B, 7, 8B, 9 and 28 with some help by Wilson. In practically all cases the original stakes were readily found by box compass and pacing, aided by the presence of sample poles bearing an aluminum paint band.

Replacement still remains to be done in Compartments 15, 16, 11B, and 24B of the first replicate and in all second replicate compartments.

G. Logging Second Replicate Compartments.

As for the 1953 compartments, administration of the sale was delegated to Carl Swanson, A.D.R., Lowman District. Due to the press of sales on his district, Swanson could spare only about one day per week to this sale, consequently the writer made more frequent inspections of progress, damaged trees, rights-of-way, etc., than during the 1953 logging. Also, the special check-scale which Swanson had made in

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1/ Wadsworth left September 3 and Richardson left September 14.

four compartments in 1953 (in addition to the 12% random check scale) was not repeated in the 1954 compartments.

As before, Gordon Greenway (forester, MacGregor Logging Company) and Glenn Youngblood (forester, Boise Payette Lumber Company) represented the operator. Greenway again collected cost data on all phases of logging to be added to that obtained in 1953.

Booklets containing instructions for cat operators and cutters were issued through Greenway, who was also given copies of the marking maps to insure finding all marked trees.

Timber felling started in Compartment 24A about October 1 and spur road construction and skidding began soon after. As before, work was concentrated first on the small cat compartments. As cutting proceeded, frequent checking of badly damaged unmarked trees was done by the writer, and, where warranted, these were marked for cut and recorded on a special form inserted in the marking book. Felling was completed November 19 and skidding completed about December 13. Hauling of logs from Compartments 20, 24A and half of 8A was done soon after skidding was completed in these compartments, but hauling of the remainder was delayed until January 1955 and completed about January 27.

H. Erosion control and slash disposal.

Cross-ditches as specified were made with the D-4 cat in Compartments 20 and 24A, but for all the rest of the 1954 compartments, because of the lateness of loading out, temporary dikes were made. These are to be reworked in the spring of 1955 to conform with ditching requirements.

All cross-ditch locations were flagged by the writer, with some help from Haupt and Swanson, in accordance with the spacing guides set up in 1953.

Because of Swanson's responsibilities at Beaver Creek, the slash disposal work was largely turned over to Dick Trestrail (A.D.R., Idaho City). The slash remaining in the 1953 compartments was treated during the summer of 1954 and piles burned after fall rains.

Favorable fall weather permitted the treatment of all 1954 compartments except part of Compartment 5. As before, much slash was used in constructing plugs in skid trails. Where slash for such use was lacking, shovelled ditches were put in many of the skid trails to divert runoff.

III. Other Field Work

A. Show-me trips.

Several show-me trips for various groups were made through the Experimental Forest to illustrate the procedures and objectives of the study. These were:

Date	Party
June 23	K. D. Flock and Boise N. F. advisory council.
July 16	Three Turkish foresters.
August 2	Frykman, West, Grossenbach, Melvin, Moran, Groves, Johannesen, Trestrail, Miller.
August 17	Craddock, Packer, Haupt, Marston and H. Orr.
September 1	Sixteen Turkish foresters.
September 23	Hughes, Flock, Frykman, Melvin.
September 30	All those attending ponderosa pine conference.

B. Cross-ditching of 1953 compartments.

In late April an inspection of the temporary dikes in the spur roads of the 1953 compartments was made by Packer, Swanson, Greenway, Youngblood and Wilson. Because of the number of dikes found

to be leaking, it was decided that genuine cross-ditches should be made on all roads which were not to be used in 1954 logging. This work was done about May 20.

C. Cross sections of pruned trees.

During the summer, Curtis and Wilson, with help by the field assistants, felled and bucked five trees which had been pruned by various methods about 1939. The bolts from the trees were stored at the headquarters until October when 42 thin cross-sections through branch whorls were sawn by Curtis and Wilson. These were stored in a basement until the last of October, taken to a Boise firm for sanding and finishing and sent to Ogden the latter part of November.

D. Scarification of clear-cut areas.

Toward Fall, an inspection of cone crops adjacent to clear-cut areas of the first replicate compartments was made by Curtis and Wilson to determine the advisability of scarifying or terracing these areas, using a small caterpillar tractor, to take advantage of the seed crop. However, cone counts were insufficient to indicate a good seed crop about these areas so no further measures in this direction were taken.

E. Bannock Creek sub-station buildings.

Preparations for moving the buildings from Bannock Creek sub-station to the Ranger Station at Idaho City were carried out to the extent of marking all trees along the road which would have to be removed to allow passage of the buildings. Skids were placed under the buildings by Ranger Station men but actual movement has been

delayed to avoid interference with logging on the Experimental Forest and while waiting to get a snow surface on all roads over which the buildings will pass.

F. Ponderosa pine conference.

A conference, attended by representatives of research and administration from all ponderosa pine regions and experiment stations was held in Boise from September 27 to October 1 and included a field trip to Boise Basin Experimental Forest. Curtis and Wilson attended from Idaho City.

IV. Field Station closing.

Closing of the field station was accomplished largely as a spare-time job by the writer (as the need for each building ended for the season) and was completed in the first part of November.